## IV. REMARKS

Claims 1-20 are pending in this application. By this Amendment, claims 1, 2, 4, 10 and 16 have been amended. These amendments are being made to facilitate early allowance of the presently claimed subject matter. Applicants reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claim priority to the instant application. Reconsideration in view of the above amendments and following remarks is respectfully requested.

In the Office Action, the Examiner requested a new, and more descriptive, title; and, correction of the use of the trademark Cupil-T in the specification. In response, Applicants have amended the title and specification to address these items.

In the Office Action, claims 1-20 are rejected under 35 U.S.C. 102(b) as being allegedly anticipated by Shih et al. (US Patent No. 6,286,208), hereinafter "Shih". Claims 1-3, 6-8, 10, 11, 13, 13, 16-18 and 20 are rejected under 35 U.S.C. 102(e) as being allegedly anticipated by Beaman et al. (US Patent Application Publication No. 2004/0135594), hereinafter "Beaman". Claims 1-8, 10-15 and 16-20 are rejected under 35 U.S.C. 102(e) as being allegedly anticipated by Brandorff et al. (US Patent No. 6,756,797), hereinafter "Brandorff". Finally, claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Brandorff in view of Shih.

Applicants respectfully submit that the claimed invention is allowable for the reasons stated below.

With respect to the rejection of claim 1 under Shih, Applicants submit that Shih does not disclose, inter alia, "an interposer structure having a connection only to the semiconductor chip

Appl. No. 10/721,984 Reply to Office Action of 12/16/05

Page 8 of 12

HOFFMAN WARNICK D ALESSANRO LLC #7285 P.010

MAR. 14 '2000 15:02 518 449 0047

and to the substrate [ ] wherein the metallurgical through connections form the connection" (emphasis added). Clearly, the element in Shih that the Office is alleging is equivalent to the present invention's "interposer structure" (i.e., interconnector 10) has a connection to elements other than a semiconductor chip and substrate. For example, interconnector 10 has a connection to dam 20 and to fasteners 56 therethrough. (See e.g., Figs. 7-9 and 13-16). In view of the foregoing, Shih does not disclose each and every feature of claim 1.

With respect to independent claims 10 and 16, as explained above, Applicants submit that Shih does not disclose, inter alia, " an interposer structure only in contact with the under bump metallization and the top surface metallization " (Claim 10), nor " positioning the interposer structure between a semiconductor chip and a substrate to electrically connect and only contact the semiconductor chip to the substrate " (Claim 16). In view of the foregoing, Shih does not disclose each and every feature of both claims 10 and 16. Accordingly, Applicants respectfully request withdrawal of the rejections.

With respect to the rejection of claim 1 under Beaman, Applicants submit that Beaman does not disclose, inter alia, "wherein the interposer structure includes an elastomeric, compliant material", as in claim 1 as amended (emphasis added). The element in Beaman that the Office alleges to be an interposer structure (i.e., compliant interposer 7), does not disclose, or suggest having any type of an elastomeric, compliant material being a part thereof. In fact, interposer 7 in Beaman consists of layers 9, 10, made of a thin sheet of metal 24 (with a thin layer 25 of insulating material 25 thereon) and frame member 16. (See e.g., ¶ 0028, 0031.) In making the rejection, the Office has not listed any specific element(s) from Beaman for disclosure of the elastomeric, compliant material (see page 7, item 2). It appears the Office is using the title of

Appl. No. 10/721,984 Reply to Office Action of 12/16/05 Page 9 of 12

Beaman and general deformability and compliance of curved interconnect wires 17 for developing an improper conclusion that Beaman must therefore disclose the aforementioned specific material of the present invention. However, the Office has not offered any specific teaching for this aspect of the present invention. Further, even assuming *arguendo* that curved interconnect wires 17, in Beaman, are compliant, clearly they are not further "elastomeric". In view of the foregoing, Beaman does not disclose each and every feature of claim 1.

With respect to independent claims 10 and 16, as explained above, Applicants submit that Beaman does not disclose, inter alia, "wherein the interposer structure comprises an elastomeric, compliant material" (Claim 10), nor "embedding metallurgical through connections within an elastomeric, compliant material to form an interposer structure" (Claim 16). In view of the foregoing, Beaman does not disclose each and every feature of both claims 10 and 16.

Accordingly, Applicants respectfully request withdrawal of the rejections.

With respect to the rejection of claim 1 under Brandorff, Applicants submit that
Brandorff does not disclose, *inter alia*, "wherein the interposer structure includes an elastomeric,
compliant material", as in claim 1 as amended. (emphasis added) The element in Brandorff that
the Office alleges to be an interposer structure (interposer 20), does not disclose, or suggest
having any type of an elastomeric, compliant material being a part thereof. In fact, interposer 20
in Brandorff includes a plate that is preferably "formed of a dielectric, such as rigid plastic"
(Col. 4, lines 9-13) and fuzz buttons 90 that are made of conductive metal wire (Col. 4, lines 2223). In making the rejection, the Office has not listed any specific element(s) from Brandorff for
disclosure of the clastomeric, compliant material (see Office Action, page 10, item 2). It appears
the Office is using the Brandorff's use of the term "compliant" in the description of the properties

Appl. No. 10/721,984 Reply to Office Action of 12/16/05

Page 10 of 12

HOFFMAN WARNICK D ALESSANRO LLC #7285 P.012

MAR.14'2006' 15:03' 518 449 0047

of the electrical connectors for making an improper conclusion that Brandorff discloses the aforementioned material of the present invention. In view of the foregoing, Brandorff does not disclose each and every feature of claim 1.

With respect to independent claims 10 and 16, as explained above, Applicants submit that Brandorff does not disclose, inter alia, "wherein the interposer structure comprises an elastomeric, compliant material" (Claim 10), nor "embedding metallurgical through connections within an elastomeric, compliant material to form an interposer structure" (Claim 16). In view of the foregoing, Brandorff does not disclose each and every feature of both claims 10 and 16. Accordingly, Applicants respectfully request withdrawal of the rejections.

Dependent claims 2-9, 11-15 and 17-20 are believed allowable for the same reasons stated above, as well as for their own additional features.

Appl. No. 10/721,984 Reply to Office Action of 12/16/05 Page 11 of 12

## **CONCLUSIONS**

Applicants respectfully submit that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

Joseph J. Christian Reg. No. 51,350

Date: MARCH 14, 2006

Hoffman, Warnick & D'Alessandro LLC 75 State Street, 14th Floor Albany, New York 12207 (518) 449-0044 (518) 449-0047 (fax)

Appl. No. 10/721,984 Reply to Office Action of 12/16/05